The Butler Weekly Times.

VOL. VIII. BUTLER, MISSOURI, WEDNESDAY NOVEMBER 24, 1886 NO. 52

MINE INSPECTOR'S REPORT,

Of Bates County For the Year 1886,

As Prepared by John Whitehead and Submitted to the Labor Commissioner of the State.

To the Hon. Oscar Kochtitzky, Labor Commissioner of Missouri:

In submitting this, my first report, I endeavor to appreciate the great responsibility resting upon me in fulfilling my duties alike to companies and miners. It was with great diffidence that I accepted the position, after the duties of the office had been so ably and judiciously performed by my most worthy and competent predecessor, M. L. Wolte, who resigned the office in November, 1885, after having served several years in that capacity. This office is of much more importance, when the objects for which it was created are fully carried out, and the responsibility resting upon the Inspector is much greater than would at first appear to an inexperienced person in mining, and the compensation at present given this officer is wholly inadequate to justify a man with the experience and ability to perform the duties devoting his time and energies to the work. I would recommend that the legislature, at its next general assembly, divide the mining portions of the state into districts, and a mine inspector be appointed to each of these districts, whose duty it shall be to look after all the mining interests in his respective district, the same as by law he is at present required to do for his county. The said Inspector to be appointed by the governor of the state, and have a fixed salary, to be paid proportionately by the counties in said district. Your Inspector, before making out his report, interviewed a number of leading miners in each mine in relation to the present mining law, and asked of them if they knew of any changes that should be made therein; if so, I would embody them in my report and endeavor to have them brought before the next legislature. The substance in every case was that they were well satisfied with the present law and its enforcement, and had no changes to recommend. The officials of the companies and the miners are working in harmony, the best of feeling existing between them. No such thing as a strike or walk-out has occurred during my term of office.

I have the honor to report the following:

WORKABLE MINES IN COUNTY.

The number of mines in Bates county required by law for your Mine Inspector to take recognizance of are eleven in full operation. These mines are all operated in the Rich Hill coal series, and do not include the strip pits nor those mines worked in other coal series of Bates county, such as Walnut, Mulberry, Hudson, etc. To include all of these in my report would run up into the hundreds, and would be both useless and tedious to enumerate. Those in operation on the Missouri Pacific Railroad are conducted by the Rich Hill Coal Mining Company and managed by the following officers: R. M. McDowell, general manager; T. Fleming, superinteadent; J. T. Reavly, assistant superintendant, and and are as follows:

MINE NO. 1,

worked by slope; the coal is drawn up to the tipple with an engine, 30 horse power, Henry Huttanus, engineer; the pit boss is George Maylen. The number of men employed is forty-nine, and fourteen hands employed in and about the mine, including George Farris, weigh boss. The coal will average 4½ to 5 feet thick; the roof is black slate and soap stone; there are two or three small veins above the main one, not workable, from 8 to 15 inches. This mine is the first one that was operated by the Rich Hill Coal Mining Company in 1880, and has been running ever since. The company is drawing the pillars at present on the north side, and on the south side where it was thought would have to be abandoned, they are working a vein from 5 to 5½ of good coal. This mine has a good furnace and air shaft and is well ventilated; located in section 36, township 39, range 32.

MINE NO. 5,

Is worked by shaft, 25 feet deep, coal hoisted by single engine, 40 horse power, Ed. Holland, engineer, and Thos Brennen, pit boss, Abel Mentzer, weigh boss. The average thickness of the vein is 4½ feet. The number of miners employed in this mine is one hundred and fifty, and thirty-five extra hands employed in and around the mines. The roofing is black slate and soap stone, in good condition. This shaft was first sunk and contracted by Alexander Wilson, but at the present time is operated by the company. Great improvement has been made in these mines, both inside and out. Three shoots have been erected, which contain a a revolving screen, which divides the coal in three sizes—egg, nut and slack—besides the lump coal, which passes directly into the cars. This screen is run by a small engine. This mine has a ventilating fan which is capable of throwing 40,000 cubic feet of air per minute; is well ventilated and fully up to the standard required by law. An average of powder used per day is 25 kegs. The miners fire their shots twice per day—at noon and at 5:30 p. m. At one time they could only fire once per day, and then in the evening, the air being insufficient to carry off the smoke and gases. There are fourteen mules used in this mine to haul the coal to the bottom of the shaft. There is an average of 40 R. R. cars loaded per day. No. 5 has also a stairway for men to go in and out of the mine. There is an ingress and egress according to law; there is also proper gates and coverings to entrance of shaft at top and lower landing as proscribed by law there should be. This mine is located in northwest corner section 36, township 39, range 32.

MINE NO. 6,

Worked by shaft, 45 feet deep, coal hoisted by double engine, 60 horse power, John X. Jones, engineer; John Graham, pit boss; Thos Graham, weigh boss. The average of vein is 5 feet, roofing is black slate and soap stone, in good condition, mine well ventilated and well propped. One hundred and fifty men are required to operate this mine, besides 35 extra hands employed in and around the mine. Mine No. 6 was first operated and contracted by Birch and Brown, and was not in good condition, but under the present management of the company is fully up to the requirements of law, regarding health, safety to employes and ventilation. There is now an air shaft with a ventilating fan with a capacity of 40,000 cubic feet of air per minute; there is also a stairway for ingress and egress, which, in connection with the shaft, makes two outlets to this mine as proscribed by law. An average of 16 kegs of powder per day is used, the miners fire their shots twice per day, the same as No. 5. The reason so much powder is not required is on account of the coal being higher and better to work. Only one shot a day was formerly fired in this mine on account of the insufficiency of air to drive out smoke and gases. The same number of coal shoots with revolving screen are attached to this mine as in No. 5 and in excellent working condition. This mine is worked with an average of 30 railroad cars per day. Right here we would digress a little to notice the efficiency of the engineer, John X Jones, who put up and run the first engine at slope No. 1. He also tests all the boilers used by the company, and has never yet had an accident. I find him faithful and efficient in the discharge of his duties. Mine No. 6 is located in Sec. 31, township 36, range 31.

MINE NO. 10,

Is operated by shaft, depth 55 feet, with a thickness of coal from 3 to 4 feet, roofing is black slate and soap stone, well propped and ventilated. The coal is drawn to the surface with single engine. 40 horse power, David Conway, engineer; E Allison, pit boss; Chas. W. Lanier, weigh boss. There are 56 miners employed in operating this mine, besides 14 extra hands in and around the mine, with four mules to draw the coal to bottom of the shaft. There are two or three small veins of coal above this workable vein, the same as in the other mines. It was thought at one time that this shaft would have to be abandoned on account of the condition of the coal, but through the perseverance of the company's officials it was found to pay, and the company has raised out of this shaft from 13 to 20 railroad cars per day. This mine is furnished with air shaft and exhaust pan or air fan, the same as in the other shafts, with the same capacity. There are two openings provided for by law for ingress and egress of men at work in this mine, one a stairway and the other the main shaft. The ventilation in this mine is first-class. It is located in southeast quarter of section 26, township 29, range 32.

MINE NO. 12

Is at present idle, but not abandoned, as there is lots of good coal to be gotten there, the vein being five feet thick.

The Hudson mines are worked by dritting. Wm. Hudson is contractor of these mines under the Rich Hill Coal Mining company, and he works 15 miners; the amount of coal produced is given in with the company's. Sim Jay, pit boss. The ventilation in this mine is very good, roofing is black slate. The mine formerly worked by Hudson & Brown has been abandoned for the present.

The Charon & Williams mines, contracted the same as the Hudson mine, by George Charon and Frank Williams, works fifteen miners and five extra hands in and around the mine. This mine is worked by slope, the coal being hauled up the slope by mule power. Thickness of vein being 4½ feet, depth below the ground about 15 feet. Geo. Charon, manager and pit boss; roofing of black slate, ventilation very good, being an air shaft and furnace. The amount of coal is given in with the company's.

The Wilson mines, worked on the same principle as above, contracted by Alexander Wilson, is worked by slope, the coal being hauled up the slope by mule power. They work nineteen miners and five extra hands in and around the mine. Thickness of vein 5½ feet, with black slate and soap stone roofing. This mine is located opposite No. 5 mine and is on the opposite side of the hill from old No. 1 slope, a part of which has been abandoned because of the great length to pull the coal. Some day this slope will run into that part of No. 1 works. The coal is about 20 or 30 feet below the surface, and is well ventilated by air shaft and furnace. Jas. Kirkby is pit and weigh boss.

The officials of this company are gentlemanly and accommodating in their dealings with the men working under them, and use every precaution for their safety and comfort in the mines. They endeavor to live up to the requirements of the law in the conduct of their mines, such as furnishing plenty of air, requisite modes of ingress and egress, and sufficient props. They have always treated your inspector with the greatest courtesy, and never failed to immediately rectify any mistakes or violations of law pointed out to them. I am glad to report that the very best of feeling exists between the managers and men, and all are working harmoniously together.

KEITH & PERRY MINES.

Mine No. 5, of the Keith & Perry Company, is located on the southwest quarter of Section 25, township 39, range 32, is operated by shaft 70 feet deep, and the vein of coal will average 5 feet in thickness, with roofing of black slate, soap stone and shale. The coal is hoisted to the surface by a double engine, 60 horse power, M. J. Hobbs, engineer. There are 101 colored miners and 66 white miners, besides 30 white and colored hands in and about the mine; twelve mules are used to haul the coal to the foot of the shaft. There is an air fan at the top of the up cast shaft, which is run by machinery and has a capacity of 40,000 cubic feet of air per minute, which gives a surplus of air all through the mine. The average of railroad cars of coal taken out per day, when the mine is in operation, is 30. There are suitable modes provided for ingress and egress as required by law. John Mackey is pit boss and Jesse Lowry weigh boss. This mine has proper gates and coverings to all entrances, as required by law. The shaft is fitted up in first-class order with all modern conveniences Notices are posted on the shaft warning all parties to keep away from the shaft, and should an accident occur it will be at said party's own risk.

MINE NO. 4,

of this company's mines is located on the southeast quarter of section 25, township 39, range 35; is worked by drift and strip pit, the coal being hauled out by mules W. M. Hodge is pit boss The number of underground miners employed are 35, all white; in the strip pit are 3 under W. Bracken, 3 under Davis & Barnard, 6 under Neptune, 3 under Houghton, 3 under Wells, 4 under Fry, 4 mule drivers, 5 road men, 2 car turners and 4 others. The coal is 8 or 10 feet under ground and the vein about 4 feet thick. Ventilation good. These mines were only run two months during the year. The Keith & Perry Company, under the able management of George R. Sweener, Superintendent, operate altogether on the Gulf railroad. They have in vogue a custom that I don't find in any other company in Bates county, that of sending to the miners at work props, rails or anything else needed in their works, by the drivers, hence obviates the necessity of their losing time from their work. Mr. Sweeney uses every precaution possible for the comfort and safety of the miners under him, and never hesitates to rectify any evil that may be pointed out to him by the inspector. He has treated your Inspector with the greatest of courtesy and is ever ready to assist him in the discharge of his official duty.

AREA OF COAL.

Mining operations in the coal series of Walnut, Mulbery and Hudson, and other series of Bates county, have not been conducted extensively enough to demand my official attention and presence but some coal is being taken out in each of the above series and I am convinced that the coal is equal in quantity and quality as in those fields being developed. Walnut has a railroad now and we have no doubt that her coal will be extensively mined in a very short time. From a careful study of the coal interests of Bates county for years, I am led to believe that the coal is almost inexhaustable. It would be impossible, however, for me to give even an intelligent approximate estimate of this vast arrear.

COAL SHIPPED DURING THE YEAR.

The following is the amount of coal mined and shipped during the year as taken from the companies records.

Rich Hill Coal Mining Company, 339,300 tons. This includes all the strippings and contracts. Keith & Perry Coal Company, 198,000 tons. This is from December 1, 1885 to 1886, inclusive.

DIVISION OF COAL.

At Nos. 5 and 6, of the Rich Hill Coal Mining Company, there are shoots or bins in operation where the coal is divided into three parts, namely, from its size, the egg, nut and slack coal. When the coal is hoisted from the mines by the main shaft, it is taken from the cage and weighed and dumped into the screen. The bars of this screen is far enough apart to let egg, nut, and slack, go through and the lump coal passes directly over the screen into the railroad cars. The egg, nut and slack is conducted by a small shoot to the revolving buckets, which convey it to the revolving screen. This screen is run by a small stationery engine, 10 horse power, which seperates the coal into the apartments above specified. This coal may then be loaded into railroad cars by simply lifting a door and let the coal run into the car.

GASES IN MINES.

No mine is ever entirely free from gases, one need not expect to find this state of things to exist, but if a sufficient current of air is sent continuously through the mines it drives out these gases before they can accumulate. There is several kinds of gases to be found, the black damp, white gas and explosive gas. I consider the white gas the most injurious from the fact that it will allow the men to work in it until they become weak and powerless to get out, usually fall to sleep and die, while explosive gas, while the most powerful can be guarded against. It clings to the top of the roofing and if not driven out by the air it would soon accumulate sufficient to become ignited from the candle of the workman and explode. It takes a certain proportion of atmospheric air mixed with this gas, before it will ignite. For instance, if a room was completely full of it free from air, it would be perfectly free from explosion until atmospheric air was let in. One foot of gas mixed with seven to ten feet of air would be the greatest explosive mixture. This gas consists of four parts of hydrogen and one of carbon. Carbonic acid gas (or black damp) is invisible, incombustable, and inexplosive. It is a positive poison and at once kills, it lays close to the bottom, like mud does in water. The miner can be warned of its presence by his light going out. After damp is a gas that accumulates just after an explosion. It has a choking sensation and it will kill it one stays in it. Its presence is recognized by a choking sensation, and a kind of lethargy takes possession of the victim. These mines being so well ventilated that there is practically no danger from any of these gases.

VENTILATION.

Proper ventilation to give plenty of good air to the men at work is one of the most important considerations in mining. This is accomplished by means of furnaces at the bottom of an up cast shaft, this furnace does not draw the air through the mines as some, even among practical miners suppose, but by heating the air it expands and lightens and rushes up the shaft and of course the heavy or cold air rushes in at the down cast to fill up the space. A great many miners use fans at the top of the up cast shaft which answers the same purpose as the furnace, this fan being run by machinery. The condition of the atmosphere has considerable to do with the quality and quantity of air received in the mines. When it is a damp day the air is not so pure, being softer, the same as when the wind is in the south it is not as pure as when it is in the north The temperature in the mine is variable according to the depth under ground and the number of men and mules worked therein. There would be a natural ventilation from these causes but not enough to furnish air for man and beast. The air to have a continuous circuit and reach all parts of the mine must have channels left open, and men working in various parts of the mine cannot be too careful in this respect in seeing that their supply of air is not interferred with by obstructions placed in the way. Any practical miner can readily tell if he has sufficient air, or if the supply is pure from obnoxious gases, this he can tell by his own feelings or by holding his lamp in the draft.

DIVISION WORK.

I have devoted much study and observation as to the best methods of furnishing fresh air to men at work, and of taking away the impure air already breathed and the smoke and impure gases. The present system used in our mines is to have only one draft of air going the full length of the mines, every miner in the works breathing the same air, now my theory is, that the men should be worked in divisions and the impure air or that used by each respected division separated from the pure air by means of an over cast and taken off to its escapes. This we believe, would prove more satisfactory and healthful to the men and be of benefit to the company in as much as the men could do much more work and in a more satisfactory manner under such favorable circumstances. This is no wild theory but is eminently practicable and should be put into effect.

BOILER TESTS.

All boilers used to generate steam for the engines at the mines have been tested by hydrostatic pressure and warm water, by a qualified person every six months, and the papers filed in my office.

IRON AND COPPER TAMPING BARS.

As a number who may read this report might wonder what is meant by a taming bar a very short explanation we think would not be amiss at this time. A tamping bar or tamping iron as it is some times called, is a bar used to firmly embed the tampting substance onto the power, this bar has a crese to fit around the needle so as to make the tamping matter thoroughly compact. In the tamping process accidents often happen by the bar striking fire from sulphur which substance is found in greater or less quantities in all coal. The question is often in dispute which is the safer to prevent accidents, the iron or copper bar In a test case by scientific men of Europe, out of 36 cases tested, 19 struck fire with iron and 9 with copper, so that the percentage is greatly in favor of copper. However, a great many miners differ on this question and we leave the matter with the practical miner to use his own judgment. Either is safe enough when proper precaution is used.

ACCIDENTS IN THE MINES.

It becomes my sad duty in submitting this, my first report to the Labor Commissioner, to chronicle the following accidents in our mines,

(Continued on Editorial Page.)

G. Wal
ce $1,00.